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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	NO. CONFIRMATION NO.	
10/796,125	03/10/2004	Michael Andries Thomas	Q79738 2475		
23373 SUGHRUE MI	7590 04/20/200 ON, PLLC	EXAMINER			
2100 PENNSYI	LVANIA AVENUE, N	TORRES, JUAN A			
SUITE 800 WASHINGTON, DC 20037			ART UNIT	PAPER NUMBER	
	•	2611			
			- <sub>-</sub>		
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
2 MO	NTHS	04/20/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary		Application	on No.	Applicant(s) THOMAS, MICHAEL ANDRIES				
		10/796,12	5					
		Examiner		Art Unit				
		Juan A. To		2611				
Period fo	The MAILING DATE of this communication ap or Reply	ppears on the	cover sheet with the c	orrespondence ac	idress			
WHIC - External after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICED FOR INSTANTANT OF THE MAILING IN	DATE OF TH .136(a). In no even d will apply and wite, cause the app	IIS COMMUNICATION ont, however, may a reply be tim I expire SIX (6) MONTHS from ication to become ABANDONE	N. nely filed the mailing date of this c D (35 U.S.C. § 133)				
Status								
1)	Responsive to communication(s) filed on 101	March 2004						
·	· · · · · · · · · · · · · · · · · · ·		on-final					
,	☐ This action is <b>FINAL</b> . 2b)☐ This action is non-final.☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
حے/ت	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
	·	Ex parto Qu	aylo, 1000 O.B. 11, 40	,0 O.O. 210.				
Dispositi	ion of Claims							
· ·	Claim(s) <u>1-9</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	5) Claim(s) is/are allowed.							
6)[	Claim(s) is/are rejected.							
7)🔯	Claim(s) <u>1-9</u> is/are objected to.							
8)□	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)🖾	The specification is objected to by the Examin	er.						
10)⊠ The drawing(s) filed on <u>10 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
	inder 35 U.S.C. § 119							
1211	Acknowledgment is made of a claim for foreign	n priority une	lor 35     S C & 110(a)	(d) or (f)				
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
۵٫۱	a) ⊠ All b) ☐ Some * c) ☐ None of:  1 ☑ Codified coning of the priority decomposite have been received.							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
* 0	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
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Attachmen	·							
	e of References Cited (PTO-892)	•	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)			Paper No(s)/Mail Da  5) Notice of Informal Pa					
Pape	r No(s)/Mail Date <u>03/10/2004</u> .		6) Other:					

#### **DETAILED ACTION**

### Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/10/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

## Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes." etc.

The <u>abstract of the disclosure is objected to because it is not limited to a single paragraph</u>. Correction is required. See MPEP § 608.01(b).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

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As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The disclosure is objected to because of the following informalities:

- a) The Specification doesn't comply with 37 CFR 1.77(b);
- b) The recitation in page 3 lines 27-28 " A further level of inter-operability can be achieved by the transceiver unit described in claim 2" is improper because claims in the prosecution of a case can change in content and in numbering; it is suggested to delete this recitation;
- c) The recitation in page 4 lines 17-21 "The sequence of execution is further addressed in claims 3 and 4. In claim 3, said self identification module is further adapted to request said transmitter unit to transmit said second downstream handshake initiation

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signal if said first downstream handshake initiation signal is not detected within said second time interval" is improper because claims in the prosecution of a case can change in content and in numbering; it is suggested to be changed to "In the sequence of execution, the self identification module is further adapted to request said transmitter unit to transmit said second downstream handshake initiation signal if said first downstream handshake initiation signal is not detected within said second time interval";

- d) The recitation in page 5 lines 1-4 "In claim 4, said self identification module is further adapted to request said transmitter unit to transmit said second upstream handshake initiation signal if said first upstream handshake confirmation signal is not detected within said third time interval" is improper because claims in the prosecution of a case can change in content and in numbering; it is suggested to be changed to "Said self identification module is further adapted to request said transmitter unit to transmit said second upstream handshake initiation signal if said first upstream handshake confirmation signal is not detected within said third time interval";
- e) The recitation in page 5 lines 14-19 "The issue of signal collision, e.g. when transceiver units at both sides are switched on simultaneously, is further addressed in claims 5 and 6. In claim 5, said self identification module is further adapted to wait for a random or pseudo-random period of time if none of the expected signals is detected" is improper because claims in the prosecution of a case can change in content and in numbering; it is suggested to be changed to "In the issue of signal collision, e.g. when transceiver units at both sides are switched on simultaneously, said self identification

module is further adapted to wait for a random or pseudo-random period of time if none of the expected signals is detected";

- f) The recitation in page 5 lines 28-29 "In claim 6, a length of any of said first time interval or said second time interval is a random or pseudo-random number" is improper because claims in the prosecution of a case can change in content and in numbering: it is suggested to be changed to "The length of any of said first time interval or said second time interval is a random or pseudo-random number";
- g) The recitation in page 6 lines 1-3 "Another characterizing embodiments of the present invention are defined in claims 7, 8, 9. Those embodiments are applicable to a xDSL transceiver unit" is improper because claims in the prosecution of a case can change in content and in numbering; it is suggested to be changed to "Another characterizing embodiments of the present invention are applicable to a xDSL transceiver unit"; and
- h) The recitation in page 7 line 21 and page 10 line 21 "4,3125 kHz" is improper because to use decimal a dot (.) symbol should be used to include decimals; it is suggested to be changed to "4.3125 kHz" (see G.991.4 page 50).

Appropriate correction is required.

## Claim Objections

Claims 1-9 are objected to because of the following informalities:

Regarding claim 1, the recitation in line 8 "remote unit," is improper, because the next limitation in the claim is the last limitation; it is suggested to be changed to "remote" unit, and".

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Regarding claims 2-9 they are objected because they depend directly or indirectly from claim 1, and claim 1 is objected.

Regarding claim 1, the recitation in line 15 of claim 1 "if" is improper, because the use the word "if" render the claim indefiniteness (35 USC § 112 2<sup>nd</sup> paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word "if" to "when".

Regarding claims 2-9 they are objected because they depend directly or indirectly from claim 1, and claim 1 is objected.

Regarding claim 1, the recitation in line 22 "time interval," is improper, because the next indication in the claim is the last indication; it is suggested to be changed to "time interval, and".

Regarding claims 2-9 they are objected because they depend directly or indirectly from claim 1, and claim 1 is objected.

Regarding claim 2, the recitation in line 7 of claim 2 "and in that self identification module is further adapted to:" is improper, because it is not correctly constructed; it is suggested to be changed to "and said self identification module is further adapted to:".

Regarding claims 3, 4, 8 and 9 they are objected because they depend directly from claim 2, and claim 2 is objected.

Regarding claim 2, the recitation in line 9 of claim 2 "if" is improper, because the use the word "if" render the claim indefiniteness (35 USC § 112 2<sup>nd</sup> paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word "if" to "when".

Regarding claims 3, 4, 8 and 9 they are objected because they depend directly from claim 2, and claim 2 is objected.

Regarding claim 2, the recitation in line 13 "(T3)," is improper, because the next limitation in the claim is the last limitation; it is suggested to be changed to "(T3), and".

Regarding claims 3, 4, 8 and 9 they are objected because they depend directly from claim 2, and claim 2 is objected.

Regarding claim 3, the recitation in line 3 of claim 3 "if" is improper, because the use the word "if" render the claim indefiniteness (35 USC § 112 2<sup>nd</sup> paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word "if" to "when".

Regarding claim 4, the recitation in line 3 of claim 4 "if" is improper, because the use the word "if" render the claim indefiniteness (35 USC § 112 2<sup>nd</sup> paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word "if" to "when".

Regarding claim 5, the recitation in lines 3 and 5 of claim 5 "if" is improper, because the use the word "if" render the claim indefiniteness (35 USC § 112 2<sup>nd</sup> paragraph indefinite); it is clear what it happens if the condition is met, but if that condition is not met is indefinite. It is suggested to change the word "if" to "when".

Appropriate correction is required.

# Allowable Subject Matter

Claims 1-9 are allowed if the above objections are overcome.

The following is an examiner's statement of reasons for allowance: claims 1-9 are allowed because the references cited fail to teach, as applicant has, a transceiver unit comprising a receiver unit adapted to detect from a physical medium a first downstream handshake initiation signal and a first upstream handshake initiation signal, a transmitter unit adapted to transmit over the physical medium a second upstream handshake initiation signal, and a self identification module adapted to identify the transceiver unit as a central unit or as a remote unit, characterized in that the self identification module is coupled to the receiver unit and the transmitter unit, and is further adapted to: wait for detection of any of the first downstream handshake initiation signal and the first upstream handshake initiation signal within a first time interval. request the transmitter unit to transmit the second upstream handshake initiation signal if none of the first downstream handshake initiation signal and the first upstream handshake initiation signal is detected within the first time interval, and wait for detection of the first downstream handshake initiation signal within a second time interval, identify the transceiver unit as a remote unit upon detection of the first downstream handshake initiation signal within the first time interval or within the second time interval, identify the transceiver unit as a central unit upon detection of the first upstream handshake initiation signal within the first time interval, as the applicant has claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a) Palm (US 6751254 B1) discloses a handshaking or initializing protocol that provides means to robustly select measurement procedures and robustly report the results of such measurement procedures;
- b) Palm (US 20050021835 A1) discloses a multiple mode of operation handshaking between DSL modems; and
- c) Palm (US 6950459 B1) discloses enabling data communication, and in particular, to an apparatus and method that detects various communication configurations and selects an appropriate communication configuration to establish a communication link.

Palm doesn't disclose a self identification module adapted to identify the transceiver unit as a central unit or as a remote unit, characterized in that the self identification module is coupled to the receiver unit and the transmitter unit, and is further adapted to: wait for detection of any of the first downstream handshake initiation signal and the first upstream handshake initiation signal within a first time interval, request the transmitter unit to transmit the second upstream handshake initiation signal if none of the first downstream handshake initiation signal and the first upstream handshake initiation signal and the first upstream handshake initiation signal is detected within the first time interval, and wait for detection of the first downstream handshake initiation signal within a second time interval, identify the transceiver unit as a remote unit upon detection of the first downstream handshake

initiation signal within the first time interval or within the second time interval, identify the transceiver unit as a central unit upon detection of the first upstream handshake initiation signal within the first time interval, as the applicant has claimed.

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This application is in condition for allowance except for the following formal matters:

See above.

Prosecution on the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is 571-272-3119. The examiner can normally be reached on 8-6 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres 03-29-2007